# UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

IN RE PHARMACEUTICAL INDUSTRY	)	
AVERAGE WHOLESALE PRICE	)	MDL No. 1456
LITIGATION	)	Civil Action No. 01-12257-PBS
	_)	
	)	Judge Patti B. Saris
	)	
THIS DOCUMENT RELATES TO	)	[FILED UNDER SEAL
ALL CLASS CASES	)	PURSUANT TO COURT ORDER
	)	

# DECLARATION OF ERIC M. GAIER, PH.D., IN SUPPORT OF THE TRACK 1 DEFENDANTS' JOINT MOTION FOR SUMMARY JUDGMENT WITH RESPECT TO CLASS 3

July 14, 2006

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# I. Summary of qualifications

(1) I am a Partner and founding Member of Bates White, LLC ("Bates White"), a professional services firm that performs economic and statistical analysis in a variety of industries and forums. Since I have previously described my qualifications to this Court, I will not repeat them here.<sup>1</sup>

# II. Scope of charge

I have been retained by counsel for the defendant manufacturers to expand upon the analysis I performed in my March 15, 2006, declaration in support of Track 1 Defendants' Joint Motion for Summary Judgment ("Summary Judgment Declaration"), in which I discussed physician-administered drug purchases made by third-party payors ("TPPs") in Massachusetts. In particular, I have been asked to present price graphs separately for each TPP and calculate markups of AWP over acquisition prices implied by each TPP's purchases. I have also been asked to exclude results pertaining to all GlaxoSmithKline drugs and AstraZeneca's Pulmicort.

## III. Materials considered

(3) I have previously submitted four declarations in the AWP MDL matters.<sup>2</sup> On October 25, 2004, I submitted a declaration supporting defendants' opposition to class certification;<sup>3</sup> on January 21, 2005, I submitted a sur-reply to the analysis of plaintiffs' expert, Dr. Raymond S. Hartman in support of defendants' opposition to class certification;<sup>4</sup> on March 15, 2006, I

Declaration of Eric M. Gaier, Ph.D. in Support of Defendants' Opposition to Class Certification, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS, October 25, 2004, ("Gaier Class Certification Declaration"), p. 4, Appendix A.

<sup>&</sup>lt;sup>2</sup> I include these previous declarations by reference here.

Gaier Class Certification Declaration.

<sup>&</sup>lt;sup>4</sup> Sur-Reply Declaration of Eric M. Gaier, Ph.D. in Support of Defendants' Opposition to Class Certification, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS, January 21, 2005 ("Gaier Sur-Reply Declaration").

submitted the Summary Judgment Declaration;<sup>5</sup> and on March 21, 2006, I submitted a merits report and declaration pertaining to Track 1 defendants.<sup>6</sup>

# IV. Drug purchases made by TPPs

(4) As I discussed in my previous declarations, knowledge regarding the differences between AWP and provider acquisition costs, as a matter of economic theory, would prevent payors from overpaying for prescription drugs as a result of the alleged AWP scheme and therefore insulate them from economic harm. As plaintiffs' expert Dr. Hartman states:

Had the existence of the 'mega-spreads' been perceived and understood by TPPs, those payors would have negotiated more aggressively than they did, leading to lower reimbursement rates.<sup>8</sup>

Judge Saris also recognizes the importance of knowledge and sophistication of TPPs. Specifically, she states:

Some TPPs may have greater sophistication because they purchase selfadministered drugs, but there is no evidence that TPPs purchase physicianadministered drugs or know of the mega-spreads that exist for these drugs.<sup>9</sup>

It is therefore appropriate to focus on the question of what TPPs in Massachusetts knew about the differences between AWP and provider acquisition costs and, in particular, whether they would have gained knowledge through purchases of physician-administered drugs. The

Declaration of Eric M. Gaier, Ph.D. in Support of Track I Defendants' Joint Motion for Summary Judgment, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS, March 15, 2006 ("Gaier Summary Judgment Declaration").

Merits Report and Declaration of Eric M. Gaier, Ph.D., U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS, March 21, 2006 ("Gaier Merits Report and Declaration").

<sup>&</sup>lt;sup>7</sup> Gaier Class Certification Declaration, Section IV.4. Also see Gaier Sur-Reply Declaration, Section V.

Declaration of Raymond S. Hartman in Support of Plaintiffs' Claims of Liability and Calculation of Damages, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS, December 15, 2005 ("Hartman Liability and Damages Declaration"), p. 10.

Memorandum and Order Re: Motion for Class Certification, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257, August 16, 2005, ("Saris' Class Certification Order"), p.59.

evidence demonstrates that TPPs covering approximately 70 percent of beneficiaries in Massachusetts bought physician-administered drugs throughout the class period. Through those purchases, Massachusetts TPPs knew of the widely varying differences between AWP and provider acquisition costs, generally knew the magnitude of these differences, and were aware of those differences since at least 1991 (the earliest date covered by data provided by defendants).

(5) The provision of health insurance in Massachusetts is relatively concentrated, with approximately 86 percent of the covered lives insured by five TPPs. Indeed, named plaintiff and class representative Blue Cross and Blue Shield of Massachusetts ("BCBS-MA") is the largest TPP in Massachusetts, insuring approximately 46 percent of the covered lives in 2004. It is instructive to also examine other large plans in Massachusetts; Table 1 summarizes the covered lives for the largest TPPs in Massachusetts.

Table 1: Massachusetts health plans by number of enrollees

Health plan	Total enrollees (1,000s)	Share of covered lives
Blue Cross Blue Shield of Massachusetts	2,288	46%
Tufts Associated Health Plan ("Tufts")	803	16%
Harvard Pilgrim Health Care, Inc. ("Harvard Pilgrim")	766	15%
CIGNA HealthCare of Massachusetts, Inc. ("CIGNA")	229	5%
Fallon Community Health Plan ("Fallon")	187	4%
Other (10 plans with more than 1,000 enrolled)	695	14%
Total	4,969	100%

Source: AIS database, 2004.

(6) Sales data provided by defendants demonstrate that four of the top five Massachusetts TPPs—plaintiff BCBS-MA, Harvard Pilgrim, CIGNA, and Fallon—purchased physician-administered drugs directly through contracts with manufacturers, through group purchasing organizations ("GPOs"), or through drug wholesalers. These purchases were made by organizations that provided medical care, required a supply of drugs for their operation, and

were owned by these TPPs.<sup>10</sup> For example, Harvard Pilgrim and Fallon were staff/group-model health maintenance organizations ("HMOs"), which are vertically integrated entities that provide both health care and insurance services. Although this form of integrated health plan arrangement is less prevalent today, many insurers owned or operated such entities during the 1990s and would have purchased physician-administered drugs.<sup>11</sup>

(7) The available evidence from manufacturers shows that these TPPs purchased significant volumes of physician-administered drugs, including many of the drugs in this litigation. Table 2 lists dollar volumes of subject physician-administered drugs purchased by these TPPs, by manufacturer. In addition, these TPP drug purchases were made over an extended period, spanning the entire class period and starting at least as early as 1991 (the earliest time period for which data have been provided by defendants). Table 3 lists dollar volumes of subject physician-administered drugs purchased by these TPPs over time.

See Appendix C for documentation of entities operated by these Massachusetts TPPs for which manufacturers document sales of physician-administered drugs.

See Kongstvedt, Peter R., The Managed Care Handbook, Aspen Publishers, Gaithersburg, 2001, pp. 34-36 for a description of this type of organization.

Table 2: Dollar volumes of subject drugs purchased directly by Massachusetts TPPs, by manufacturer

Manufacturer	Time coverage of available data	BCBS-MA <sup>12</sup>	CIGNA <sup>13</sup>	Fallon <sup>14</sup>	Harvard Pilgrim <sup>15</sup>
AstraZeneca	91–04		\$1,416,150	\$1,275,699	\$1,231,925
Bristol-Myers Squibb	93–02	\$138,389	\$1,099,332	\$942,688	\$706,249
Johnson & Johnson	91–99	\$511,377	\$3,595,116	\$1,077,477	\$1,172,335
Schering-Plough	91–04	\$96,549	\$5,178,432	\$2,591,897	\$2,048,990
	Total	\$746,314	\$11,289,030	\$5,887,762	\$5,159,499

Source: AstraZeneca, Bristol-Myers Squibb, Johnson & Johnson, and Schering-Plough indirect sales data.

<sup>12</sup> I include all purchases in which plaintiff BCBS-MA or its related entities are listed as customers or contract owners in manufacturer chargeback data. Plaintiff BCBS-MA-related entities purchasing subject drugs directly from manufacturers include HMO Blue, Medical East, and Medical West.

I include all purchases in which CIGNA or its related entities are listed as customers or contract owners in manufacturer chargeback data. CIGNA-related entities purchasing subject drugs directly from manufacturers include CIGNA Healthplan, CIGNA Pharmacy, Connecticut General Life Insurance Company, INA Healthplan, Lovelace, Tel-Drug, EQUICOR, and Healthsource.

<sup>&</sup>lt;sup>14</sup> I include all purchases in which Fallon or its related entities are listed as customers or contract owners in manufacturer chargeback data. Fallon-related entities purchasing subject drugs directly from manufacturers include Fallon Community Health Care, Fallon Clinic, and Fallon Central Pharmacy.

I include all purchases in which Harvard Pilgrim or its related entities are listed as customers or contract owners in manufacturer chargeback data. Harvard Pilgrim-related entities purchasing subject drugs directly from manufacturers include Harvard Pilgrim Healthcare, Harvard Community Health Plan, Harvard Vanguard, and Rhode Island Group Health (also known as Harvard Community Health Plan of New England).

Table 3: Dollar volumes of subject drugs purchased directly by Massachusetts TPPs, by year

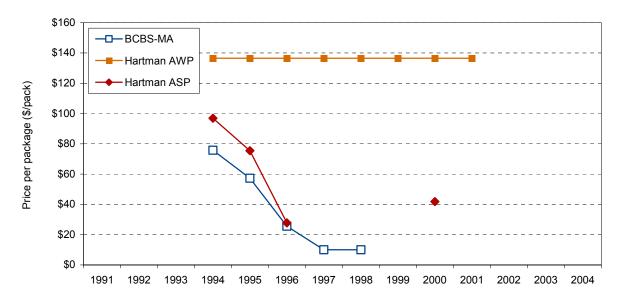
Year	BCBS-MA	CIGNA	Fallon	Harvard Pilgrim
1991	\$873	\$333,323	\$36,258	\$79,334
1992	\$24,757	\$676,409	\$60,983	\$153,853
1993	\$56,739	\$969,456	\$182,672	\$224,164
1994	\$97,608	\$1,252,642	\$296,381	\$349,408
1995	\$123,943	\$1,525,829	\$187,848	\$514,739
1996	\$204,843	\$1,549,650	\$426,002	\$908,120
1997	\$219,834	\$939,596	\$594,767	\$974,207
1998	\$17,717	\$1,448,904	\$894,794	\$867,772
1999		\$1,023,822	\$936,257	\$513,397
2000		\$682,806	\$820,315	\$156,974
2001		\$411,991	\$859,177	\$212,816
2002		\$460,958	\$539,284	\$142,822
2003		\$13,644	\$45,639	\$47,424
2004			\$7,385	\$14,469
Total	\$746,314	\$11,289,030	\$5,887,762	\$5,159,499

Source: AstraZeneca, Bristol-Myers Squibb, Johnson & Johnson, and Schering-Plough indirect sales data.

(8) Importantly, these Massachusetts TPPs purchased physician-administered drugs at discounted prices generally at, and in many cases below, the ASPs calculated by plaintiffs' expert Dr. Hartman. Therefore, these TPPs would have known about the widely varying differences between AWP and provider acquisition costs and would have known about the magnitude of these differences for the very drugs for which Dr. Hartman purports to find damages. Figure 1 to Figure 15 below depict the AWP and ASP reported by Dr. Hartman along with the average discounted prices paid by the Massachusetts TPPs for a sample of the physician-administered drugs for which Dr. Hartman finds damages. Appendix B contains corresponding figures for additional subject drugs purchased by Massachusetts TPPs.

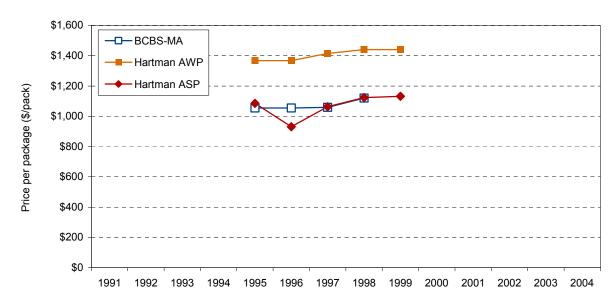
# IV.1. BCBS-MA

Figure 1: Vepesid prices to BCBS-MA



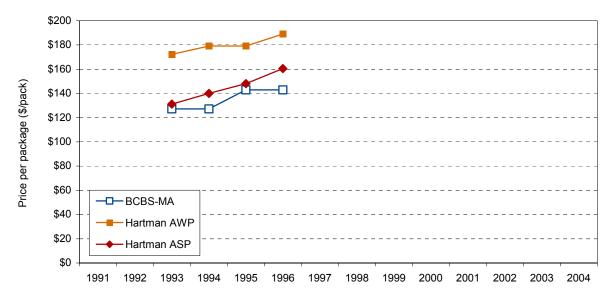
Source: Bristol-Myers Squibb indirect sales data—NDC 00015309520.

Figure 2: Procrit prices to BCBS-MA



Source: Johnson & Johnson indirect sales data—NDC 59676031201.

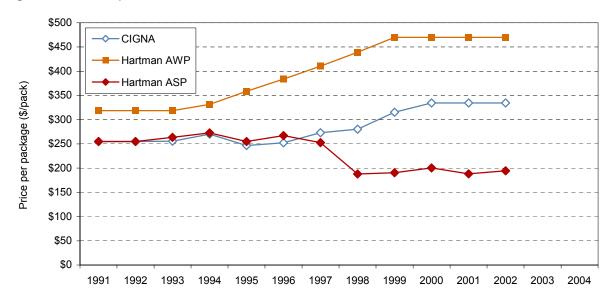
Figure 3: Intron prices to BCBS-MA



Source: Schering-Plough indirect sales data—NDC 00085064705.

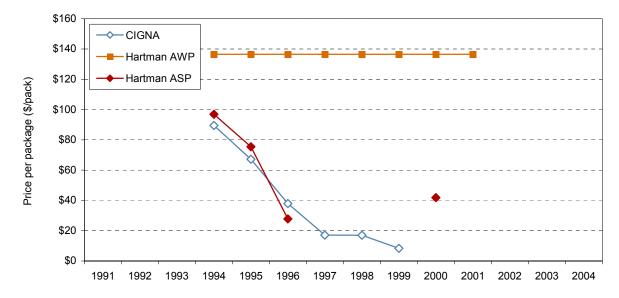
# **IV.2. CIGNA**

Figure 4: Zoladex prices to CIGNA



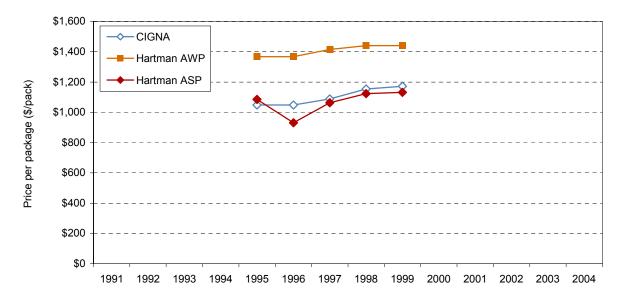
Source: AstraZeneca indirect sales data—NDC 00310096036.

Figure 5: Vepesid prices to CIGNA



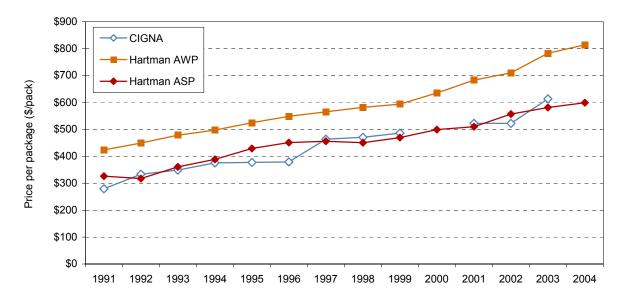
Source: Bristol-Myers Squibb indirect sales data—NDC 00015309520.

Figure 6: Procrit prices to CIGNA



Source: Johnson & Johnson indirect sales data—NDC 59676031201.

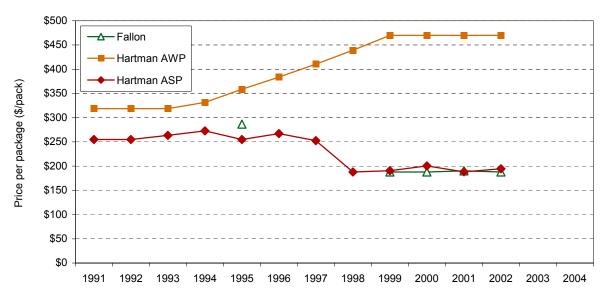
Figure 7: Intron prices to CIGNA



Source: Schering-Plough indirect sales data—NDC 00085053901.

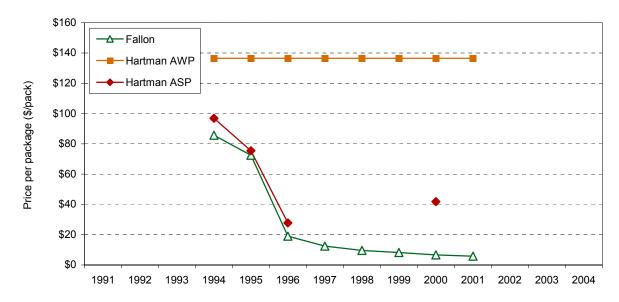
## IV.3. Fallon

Figure 8: Zoladex prices to Fallon



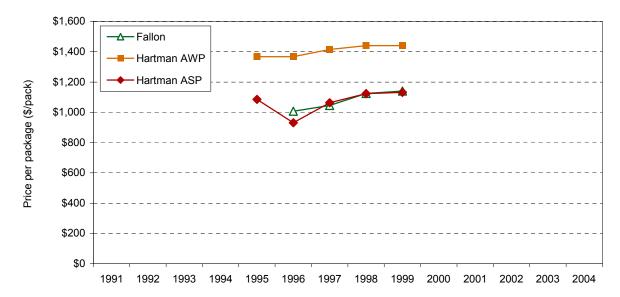
Source: AstraZeneca indirect sales data—NDC 00310096036.

Figure 9: Vepesid prices to Fallon



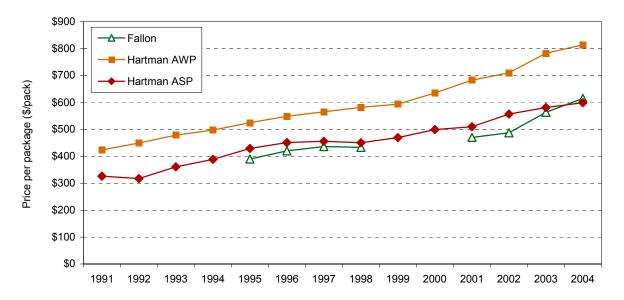
Source: Bristol-Myers Squibb indirect sales data—NDC 00015309520.

Figure 10: Procrit prices to Fallon



Source: Johnson & Johnson indirect sales data—NDC 59676031201.

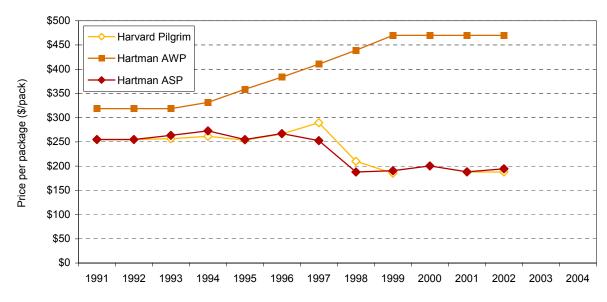
Figure 11: Intron prices to Fallon



Source: Schering-Plough indirect sales data—NDC 00085053901.

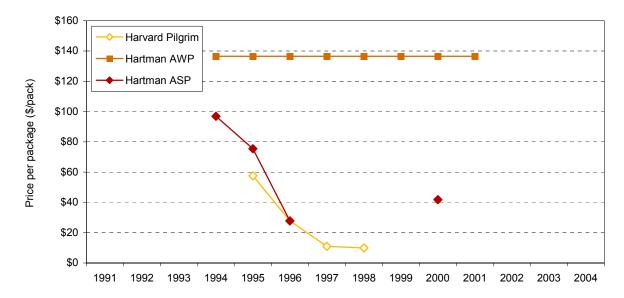
# IV.4. Harvard Pilgrim

Figure 12: Zoladex prices to Harvard Pilgrim



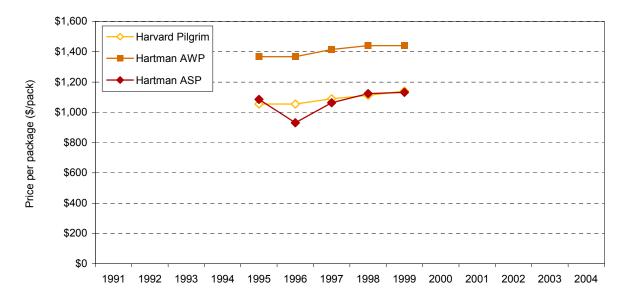
Source: AstraZeneca indirect sales data—NDC 00310096036.

Figure 13: Vepesid prices to Harvard Pilgrim



Source: Bristol-Myers Squibb indirect sales data—NDC 00015309520.

Figure 14: Procrit prices to Harvard Pilgrim



Source: Johnson & Johnson indirect sales data—NDC 59676031201.

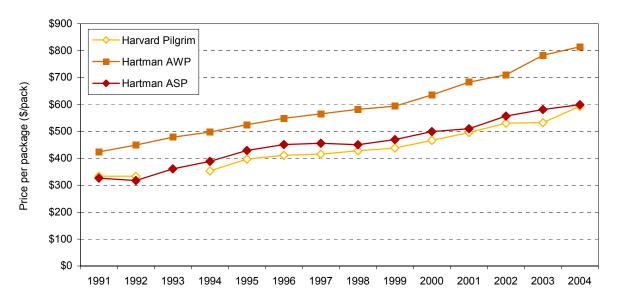


Figure 15: Intron prices to Harvard Pilgrim

Source: Schering-Plough indirect sales data—NDC 00085053901.

(9) Table 4 to Table 18 below depict the markups of AWP over acquisition prices implied by each Massachusetts TPP's purchases. <sup>16</sup> The tables demonstrate that these TPPs would have been aware of the widely varying differences between AWP and provider acquisition costs and would have knowledge of "spreads" exceeding the 30 percent yardstick employed by Dr. Hartman.

Markups are the differences between Dr. Hartman's AWPs and the Massachusetts TPP purchase prices, expressed as a percentage of the purchase prices.

Table 4: Markups of AWP over BCBS-MA's purchase prices for Bristol-Myers Squibb drugs

				Year		
Drug	NDC	1994	1995	1996	1997	1998
BLENOXANE	00015301020				79.2%	
	00015306301			60.3%	83.4%	84.6%
PARAPLATIN	00015321330	26.3%		26.3%	21.1%	31.5%
	00015321430	26.3%		26.3%	23.0%	30.4%
	00015321530			26.4%	26.3%	30.4%
TAXOL	00015345620		25.0%			
	00015347527			25.0%		
	00015347627			25.0%		
VEPESID	00015308420				1264.9%	
	00015309520	80.1%	138.3%	433.8%	1257.7%	1264.9%

Source: Bristol-Myers Squibb indirect sales data.

Table 5: Markups of AWP over BCBS-MA's purchase prices for Johnson & Johnson drugs

					Υe	ar			
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998
PROCRIT	59676030201				29.7%	29.7%	29.7%	27.9%	
	59676030301				29.3%	29.6%	29.7%	29.2%	
	59676030401			26.3%	29.6%	29.5%	29.7%	29.3%	
	59676030402				29.4%	29.7%			
	59676031001			23.7%	29.4%	29.3%	29.7%	33.5%	
	59676031201					29.7%	29.7%	33.7%	28.5%
	59676032001							26.9%	
	00062740003		26.0%	28.1%					
	00062740103		23.7%	29.1%					
	00062740201	23.9%	26.5%	26.9%					
	00062740501		28.0%	28.5%					

Source: Johnson & Johnson indirect sales data.

Table 6: Markups of AWP over BCBS-MA's purchase prices for Schering-Plough drugs

					Y	ear			
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998
ALBUTEROL	59930150008				163.0%	209.0%	255.4%		
	59930151504					100.7%	117.4%	130.6%	
INTRON	00085012002								23.8%
	00085012003				40.9%				
	00085053901						38.3%		
	00085057102					32.3%			
	00085064704			34.1%	40.9%	25.5%	32.3%		
	00085064705			35.5%	40.9%	25.4%	32.3%		
	00085095301						32.3%		
	00085117901								23.8%
	00085118401							26.6%	23.9%
	00085118402							25.6%	23.8%
	00085119101								23.8%
PERPHENAZINE	59930160001						268.0%	268.0%	
	59930160301						271.4%		
	59930160501						231.9%		
PROVENTIL	00085020802			117.2%	117.2%		25.9%		
	00085020901	56.7%			139.1%				

Source: Schering-Plough indirect sales data.

Table 7: Markups of AWP over CIGNA's purchase prices for AstraZeneca drugs

								Ye	ar						
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
ZOLADEX	00310096036	25.0%	25.0%	24.8%	22.8%	45.3%	52.1%	50.3%	56.7%	49.0%	40.5%	40.5%	40.5%		
	00310096130						44.3%	43.1%	50.8%	48.3%	40.0%	40.5%	40.5%		

Source: AstraZeneca indirect sales data.

Table 8: Markups of AWP over CIGNA's purchase prices for Bristol-Myers Squibb drugs

						Ye	ar				
Drug	NDC	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
BLENOXANE	00015301020				55.0%	55.0%	55.0%		182.0%	207.7%	207.7%
	00015306301								240.5%	265.9%	265.9%
CYTOXAN	00015050141	86.8%									
	00015050301				19.6%	19.6%	21.6%				67.7%
	00015050641	117.9%									
	00015053941	106.7%		186.7%	186.7%	158.0%				222.5%	
	00015054641	129.8%		250.0%	250.0%	308.3%	308.3%			390.0%	
	00015054741	124.8%		311.4%	311.4%	433.2%	441.3%	441.3%		471.3%	
	00015054841	149.4%		292.6%	343.7%	475.3%	494.2%	533.7%	542.9%	551.0%	549.0%
	00015054941							543.1%	543.1%	543.1%	546.9%
PARAPLATIN	00015321330							26.3%	26.7%	28.4%	34.6%
	00015321430				19.6%			26.3%	26.6%	27.8%	35.4%
	00015321530				19.6%		25.0%	26.3%	26.7%	28.4%	36.4%
VEPESID	00015306120								2228.9%	2319.6%	2319.6%
	00015308420			90.9%							
	00015309520		52.5%	103.2%	259.6%	695.5%	702.9%	1530.5%			

Source: Bristol-Myers Squibb indirect sales data.

Table 9: Markups of AWP over CIGNA's purchase prices for Johnson & Johnson drugs

						Year				
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998	1999
PROCRIT	59676030201			29.7%	29.7%	30.4%	30.4%	29.0%	21.4%	21.2%
	59676030202					30.4%	30.4%	21.2%	21.2%	21.2%
	59676030301			29.7%	29.7%	30.4%	30.4%	27.8%	21.5%	21.2%
	59676030302				29.7%	30.4%	30.4%	21.2%	21.2%	21.2%
	59676030401			29.7%	29.7%	30.4%	30.4%	22.5%	21.4%	21.2%
	59676030402				29.7%	30.4%	30.4%		21.2%	
	59676031001			29.7%	29.7%	30.4%	30.4%	28.4%	22.6%	21.3%
	59676031002				29.7%	30.3%	30.4%	21.2%	22.3%	21.2%
	59676031201					30.4%	30.4%	30.0%	24.7%	22.9%
	59676032001							24.6%	22.5%	23.7%
	59676034001									24.7%
	00062740003	29.6%	29.7%	29.7%						
	00062740103	29.7%	29.7%	29.7%						
	00062740201	29.7%	29.7%	29.7%						
	00062740501	29.7%	29.7%	29.7%						

Source: Johnson & Johnson indirect sales data.

Table 10: Markups of AWP over CIGNA's purchase prices for Schering-Plough drugs

								Year						
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
ALBUTEROL	59930150008					524.4%	642.0%							
	59930151504				113.7%	60.9%	17.1%	4584.4%						
INTRON	00085012002	46.4%	31.3%	35.5%	34.9%	31.9%	38.5%	15.0%	23.7%	23.2%	30.2%	43.3%		
	00085012003	34.8%	31.0%	35.5%	37.1%	31.9%	39.1%							
	00085012004		35.5%	32.7%	32.3%	31.9%	39.1%							
	00085012005						36.9%	14.9%						
	00085028502	22.4%	27.2%	33.7%	39.6%	31.9%	38.4%	14.9%	22.6%		20.3%	27.6%	36.0%	
	00085053901	51.7%	34.8%	37.1%	32.5%	39.1%	44.8%	21.9%	23.6%	22.1%		30.8%	36.0%	27.7%
	00085057102	27.2%	32.7%	36.1%	36.7%	39.1%	45.0%	23.2%	26.9%	23.1%	29.0%		38.7%	46.9%
	00085057106			35.5%	31.9%	31.9%	38.5%	14.8%						
	00085064703	22.4%	29.4%	35.1%	34.5%	31.9%	38.6%	15.6%	23.8%	24.2%				
	00085064704	22.4%	29.9%	34.0%	36.6%	31.9%	38.7%	15.0%						
	00085064705	22.4%	30.3%	31.1%	34.8%	31.9%	38.2%	13.6%			30.2%	43.3%		
	00085068901		31.9%	35.7%	32.5%	31.9%	31.9%							
	00085076901 <sup>17</sup>			40.9%	40.9%	559.4%	37.9%	14.9%						
	00085092301			40.9%	33.4%	163.7%	38.9%	14.9%						
	00085095301					39.1%	38.7%	14.9%						
	00085111001						45.4%							
	00085113301							23.6%	26.7%	25.3%	36.6%			
	00085116801							23.6%	24.9%	26.1%	36.6%	45.8%	38.7%	
	00085117901							23.6%	22.8%	15.1%				
	00085117902							23.6%	25.5%	25.3%	36.6%	63.5%		
	00085118401							23.8%	21.2%	19.3%				
	00085118402							23.6%	22.0%	19.5%	43.3%	35.4%	38.7%	
	00085119101							23.7%	22.6%	18.5%				
	00085119102							23.6%	21.8%	18.9%	43.9%			
	00085123501								23.6%	25.4%	36.6%	46.9%		
	00085124201								23.6%	25.5%	36.6%	39.9%	38.7%	24.8%
	00085125401								23.6%	25.3%	36.6%	38.0%	38.0%	
PERPHENAZINE	59930160501								521.0%	521.0%	521.0%	521.0%		
PROVENTIL	00085020802	72.9%	95.3%	95.3%	95.3%	87.0%	58.0%							
	00085020901	95.6%	121.8%	167.9%	172.3%	124.7%	67.2%					21.3%		
TEMODAR	00085124402												20.0%	31.0%
	00085125901													23.6%
	00085125902												20.0%	31.0%

Source: Schering-Plough indirect sales data.

Dr. Hartman's AWP of \$1,244.40 in 1995 appears to be incorrect. From January 1, 1995 until March 1, 1995, the AWP published in Medi-Span is \$248.88. Effective March 1, 1995 and continuing through the end of the year, the AWP published in Medi-Span is \$262.57. See Medi-Span Comprehensive Price History File.

Table 11: Markups of AWP over Fallon's purchase prices for AstraZeneca drugs

		Year							
Drug	NDC	1995	1996	1997	1998	1999	2000	2001	2002
ZOLADEX	00310096036	25.0%				150.0%	150.0%	147.3%	150.0%
	00310096130					150.0%	150.0%	142.7%	150.0%

Source: AstraZeneca indirect sales data.

Table 12: Markups of AWP over Fallon's purchase prices for Bristol-Myers Squibb drugs

					Y	ear			
Drug	NDC	1994	1995	1996	1997	1998	1999	2000	2001
BLENOXANE	00015301020			60.4%	72.1%	99.6%	110.8%	116.0%	204.1%
	00015301026						125.6%		
	00015306301							210.8%	254.8%
CYTOXAN	00015054841			250.3%	369.1%	432.2%	491.4%	509.4%	511.1%
	00015054941			236.2%	365.0%	483.3%	509.3%	506.7%	511.9%
PARAPLATIN	00015321330	26.3%		26.6%	24.3%	26.2%	26.7%	25.8%	28.3%
	00015321430	26.3%		26.6%	23.7%	26.2%	26.7%	26.1%	28.6%
	00015321530	26.3%		26.6%	23.5%	25.4%	27.1%	26.0%	28.7%
VEPESID	00015306220			437.9%					
	00015309145					20.2%	28.5%		
	00015309520	59.3%	88.3%	616.0%	993.9%	1315.7%	1550.6%	1963.6%	2240.6%
	00015309530		259.2%	458.9%	993.7%				

Source: Bristol-Myers Squibb indirect sales data.

Table 13: Markups of AWP over Fallon's purchase prices for Johnson & Johnson drugs

						Year				
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998	1999
PROCRIT	59676030201			27.7%	29.6%	31.4%	33.2%	28.2%	26.3%	26.3%
	59676030301			27.7%	29.3%	31.3%	33.3%	31.9%	26.3%	26.3%
	59676030302							33.3%	26.3%	
	59676030401			27.7%	29.1%	31.4%	33.2%	31.7%	26.3%	26.3%
	59676031001			27.7%	29.5%	31.4%	36.4%	35.8%	28.1%	26.3%
	59676031002						36.4%	38.8%	28.5%	
	59676031201						35.8%	35.4%	28.0%	26.3%
	59676032001							26.3%	27.8%	26.3%
	59676034001									26.3%
	00062740003	23.7%	25.7%	27.6%						
	00062740103	23.7%	25.6%	27.7%						
	00062740201			27.7%						
	00062740501	23.7%	25.1%	27.7%						

Source: Johnson & Johnson indirect sales data.

Table 14: Markups of AWP over Fallon's purchase prices for Schering-Plough drugs

								Yea	ar						
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
ALBUTEROL	59930150008						266.7%	1206.9%	744.7%	577.2%	509.1%	811.0%	789.7%		
	59930151504							11.8%	-50.6%	-71.7%	-52.0%	-44.1%	220.2%	529.8%	
INTRON	00085012002	46.6%		35.5%	40.9%	20.4%	29.8%		29.1%						
	00085012003		34.8%			22.7%	34.7%								
	00085012004				40.9%	40.9%									
	00085012005						20.1%	20.1%							
	00085028502			35.5%	40.9%	27.7%	29.5%					46.4%			
	00085053901					34.7%	30.6%	29.6%	34.3%			45.3%	45.8%	39.0%	32.3%
	00085057102	27.2%	34.8%	35.5%	40.9%	34.7%	25.5%	29.2%	32.6%						
	00085057106			35.5%	40.9%	13.8%	33.0%								
	00085064703		34.8%	35.5%	40.9%	18.8%	31.5%	19.2%	30.5%						
	00085064704	22.4%	34.8%	34.1%	40.9%										
	00085064705		34.8%	35.5%	40.9%	25.8%	28.2%	19.4%							
	00085068901			36.0%	41.4%										
	00085076901			40.9%	40.9%										
	00085092301			40.9%	40.9%	156.3%	27.7%	20.1%							
	00085095301						34.7%	20.0%							
	00085111001							29.2%	34.3%						
	00085116801							23.6%	34.3%		39.6%	47.8%	41.1%		
	00085117901							28.4%	28.2%	25.0%					
	00085117902								31.3%	31.1%	39.6%	45.5%			
	00085118401							23.8%							
	00085118402							29.2%	28.5%	26.1%	46.4%	43.5%	42.7%		
	00085119102								30.4%	25.0%					
	00085123501								30.4%	33.0%	39.6%	50.1%	39.0%		
	00085124201								30.4%	31.6%	39.6%	41.2%	42.5%		
	00085125401									31.2%	39.6%	42.6%	41.3%		
PROVENTIL	00085020802	91.0%	117.2%	117.2%	116.6%	101.5%	25.9%	31.9%	31.9%		30.7%	40.8%			
	00085020901	103.0%	139.1%	139.1%	138.8%	30.3%	25.6%	34.2%	30.5%	33.4%	30.5%	40.5%	43.6%		

Source: Schering-Plough indirect sales data.

Table 15: Markups of AWP over Harvard Pilgrim's purchase prices for AstraZeneca drugs

			Year										
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
ZOLADEX	00310096036	25.0%	25.0%	24.2%	26.8%	41.3%	44.0%	41.8%	109.2%	153.6%		150.0%	150.0%
	00310096130						40.7%	40.6%	125.1%	152.7%	150.1%	150.0%	150.0%

Source: AstraZeneca indirect sales data.

Table 16: Markups of AWP over Harvard Pilgrim's purchase prices for Bristol-Myers Squibb drugs

						Ye	ar				
Drug	NDC	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
BLENOXANE	00015301020				59.7%	81.8%	101.0%	111.8%	159.4%	182.0%	
CYTOXAN	00015050301				26.0%	28.6%	30.3%	33.3%	38.5%		
	00015050401					28.8%	30.0%	35.8%	40.4%		
	00015054741								447.0%		
	00015054841	119.8%			367.5%	367.5%	417.1%	524.9%	542.9%	542.9%	
PARAPLATIN	00015321330				26.3%		21.7%	31.6%		28.6%	
	00015321430				26.3%		21.7%	31.6%		28.8%	
	00015321530				26.3%		22.2%	31.6%		28.3%	
VEPESID	00015309145				27.7%	28.4%	30.2%	33.0%	38.7%		
	00015309520			136.8%	388.9%	1137.9%	1275.2%				136.8%

Source: Bristol-Myers Squibb indirect sales data.

Table 17: Markups of AWP over Harvard Pilgrim's purchase prices for Johnson & Johnson drugs

					Y	ear			
Drug	NDC	1992	1993	1994	1995	1996	1997	1998	1999
PROCRIT	59676030201			29.6%	29.8%	29.7%	26.6%	23.4%	22.4%
	59676030202							26.3%	26.3%
	59676030301			29.1%	30.6%	29.3%	25.6%	23.3%	23.8%
	59676030302		25.0%	29.7%	29.7%	29.7%	26.1%	23.6%	26.3%
	59676030401		26.7%	29.3%	29.9%	29.7%	26.0%	23.4%	23.6%
	59676030402		27.9%	29.7%	29.7%	29.7%	26.2%	24.0%	26.3%
	59676031001		26.4%	29.7%	29.7%	29.7%	30.2%	29.0%	28.9%
	59676031002			29.7%		29.7%	29.3%	29.6%	27.2%
	59676031201				29.7%	29.7%	29.9%	29.5%	26.3%
	59676032001							29.1%	28.9%
	59676034001								26.3%
	00062740003	25.3%	26.9%						
	00062740103	25.5%	27.4%						
	00062740201	25.6%	27.4%						
	00062740501	28.0%	28.0%						

Source: Johnson & Johnson indirect sales data.

Table 18: Markups of AWP over Harvard Pilgrim's purchase prices for Schering-Plough drugs

								Yea	r						
Drug	NDC	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
ALBUTEROL	59930150006								358.0%	358.0%	358.0%	358.0%			
	59930150008					245.7%	268.2%	280.5%	325.8%	358.3%					
	59930151504					123.2%	154.5%	160.7%	160.7%	160.7%					
INTRON	00085012002	46.4%	34.8%	35.5%	40.9%	25.4%	28.2%	27.5%	29.5%	33.4%					
	00085012003		34.8%	35.5%		25.4%	31.8%								
	00085012004		43.6%	35.5%	40.9%	26.3%									
	00085012005						27.5%	27.7%							
	00085028502	22.4%	34.8%		40.9%	25.4%									
	00085053901	27.2%	34.8%		40.9%	32.3%	33.4%	36.0%	36.0%	35.5%	36.1%	37.8%	33.8%	46.9%	37.3%
	00085057102	27.2%	34.3%	35.5%	40.9%	32.3%	33.4%	34.9%	36.6%	36.1%			33.3%	46.9%	
	00085057106			35.5%	40.9%	28.7%	26.2%	27.7%							
	00085064703	22.4%	34.7%	35.5%	40.9%	25.8%	28.5%	26.6%	33.4%						
	00085064704	22.4%	34.8%	34.1%	40.9%	25.8%	28.1%	27.7%							
	00085064705	22.4%	34.7%	35.5%	40.9%	25.9%	27.7%	27.7%				37.6%			
	00085068901			36.0%	41.4%	25.4%	24.8%								
	00085076901 <sup>18</sup>				40.9%	527.1%									
	00085092301			40.9%		150.8%									
	00085095301					32.3%	28.9%	27.7%							
	00085111001						31.0%	35.5%	35.5%	34.1%	38.5%	44.3%	33.4%	43.4%	35.1%
	00085113301							35.0%					31.8%	44.1%	
	00085116801							34.3%	35.5%	34.3%	41.4%	30.3%			33.3%
	00085117901							34.2%	33.0%	28.5%					
	00085117902							34.4%	35.5%	34.5%	40.4%	30.3%			
	00085118401							37.4%	29.6%	29.0%					
	00085118402							34.8%	31.6%	28.6%	46.8%	35.7%			
	00085119101							34.8%		28.7%					
	00085119102							35.5%	30.5%	29.5%	49.2%	42.8%			
	00085123501								33.4%	35.0%				38.7%	33.3%
	00085124201								33.4%	34.6%	38.1%	43.6%	34.9%	44.1%	
	00085125401									34.1%	36.1%	39.9%	31.6%	44.1%	
PERPHENAZINE	59930160301									420.0%					
	59930161001								332.0%						
PROVENTIL	00085020802	117.8%	116.4%	117.2%	117.2%	48.2%	28.0%	36.9%	37.2%	45.7%	37.7%		48.4%		
	00085020901	123.6%	131.8%	139.1%	139.1%	33.5%	27.3%	35.4%	36.9%	45.2%	38.5%	46.9%			

Source: Schering-Plough indirect sales data.

<sup>&</sup>lt;sup>18</sup> See footnote 17 above.

Declaration	of Eric M.	Gaier,	Ph.D.
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(10)	In summary, the manufacturer sales data demonstrate that at least four of the largest five
	TPPs in Massachusetts—including plaintiff BCBS-MA and collectively representing
	approximately 70 percent of the beneficiaries in Massachusetts—had knowledge that the
	subject physician-administered drugs were available to providers at substantial discounts
	from AWP and knew the magnitude of those discounts since at least 1991.

I declare under penalty of perjury that this declaration is true and correct.

٤	July 14, 2006

Eric M. Gaier, Ph.D.

# **Appendix A: Materials considered**

#### **Declarations**

- Declaration of Eric M. Gaier, Ph.D. in Support of Defendants' Opposition to Class Certification, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS, October 25, 2004
- Declaration of Raymond S. Hartman In Support of Plaintiffs' Claims of Liability and Calculation of Damages, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS, December 15, 2005
- Liability Report of Dr. Meredith Rosenthal, December 15, 2005.
- Memorandum and Order Re: Motion for Class Certification, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257, August 16, 2005
- Sur-Reply Declaration of Eric M. Gaier, Ph.D. in Support of Defendants' Opposition to Class Certification, U. S. District Court for the District of Massachusetts, MDL No. 1456, Civil Action: 01-CV-12257-PBS, October 25, 2004

## **Depositions**

• Mulrey, Michael: Blue Cross Blue Shield of Massachusetts

#### **Electronic data**

- AstraZeneca Chargeback Data
  - cntmgt\_zoladex\_indirect\_sales
  - AZ Sales Based Customers.csv
- Bristol-Myers Squibb Chargeback Data
  - bms indirect pre1997
- Johnson & Johnson Chargeback Data
  - jj imhe combined chargeback
- Schering-Plough Chargeback Data

- schering\_chargeback\_1991\_1994
- schering\_chargeback\_1995\_1998
- schering\_chargeback\_1999\_2001
- schering chargeback 2002 2004

#### **Publicly available documents**

- AIS's Directory of Health Plans: 2004, MCOs table
- Kongstvedt, Peter R. The Managed Care Handbook, Aspen Publishers, Gaithersburg, 2001

#### **Websites**

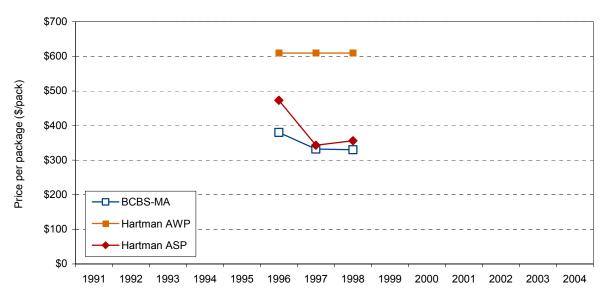
- http://www.bluecrossma.com/common/en US/aboutUsIndex.jsp
- http://www.bluecrossma.com/common/en\_US/healthPlansIndex.jsp?levelOneDotFive Category=HMO&levelTwoCategory=HMO+Blue&targetTemplate=titleBodyAddLvl.jsp
- http://www.bluecrossma.com/common/en\_US/aboutUsIndex.jsp?repId=
  Repositories.PressReleases.2001PressReleases.pressRelease04052001.xml&levelTwoCat
  egory=News+%28with+Archives%29&isLevelThreeSelected=true&targetTemplate=pres
  sReleaseDetail.jsp&iphl=medicall:medical:east
- http://caselaw.lp.findlaw.com/cgi-bin/getcase.pl?court=1st&navby=case&no=012586
- http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstr act&list\_uids=10133054&query\_hl=2&itool=pubmed\_docsum
- http://www.cigna.com/health/consumer/service/pharmacy\_claim.html
- http://www.cigna.com/general/about/history.html
- http://www.cigna.com/general/about/investor/release/10k20021231.html
- http://www.ardenthealth.com/CustomPage.asp?PageName=Lovelace
- http://www.lovelacesandia.com/CustomPage.asp?guidCustomContentID=A89B6170-7BC2-4F3D-97A5-41F9BA70E1D5

- http://www.equityleague.org/PDF/cigna\_pharmacy\_guide.pdf
- http://www.fchp.org/about/index.aspx
- http://www.fchp.org/brokers/qa.aspx#Anchor246
- http://www.bizjournals.com/boston/stories/2005/01/03/daily50.html
- http://www.fallonclinicfoundation.org/ourstory/ourstory.aspx
- http://www.fchp.org/SeniorPortal/Sales.aspx
- http://www.fallonclinic.com/internet/patients/index.aspx?PAGE=locations&LEVEL1=patients&LEVEL2=locations
- http://www.fchp.org/brokers/resources/brokerEdge/BrokerEdgeFall02.pdf
- http://www.prospect.org/columns/kuttner/bk000109.html
- http://www.bizjournals.com/boston/stories/1999/12/20/story6.html
- http://www.harvardvanguard.org/about/faq.asp
- http://www.managedcaremag.com/archives/0002/0002.harvard.html
- http://findarticles.com/p/articles/mi\_qa4100/is\_200506/ai\_n14715983

# Appendix B: Additional examples of drugs purchased by Massachusetts TPPs<sup>19</sup>

#### **BCBS-MA**

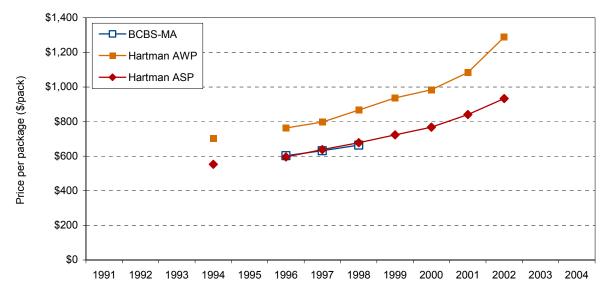
Figure 16: BLENOXANE (NDC 00015306301) prices to BCBS-MA



Source: Bristol-Myers Squibb indirect sales data.

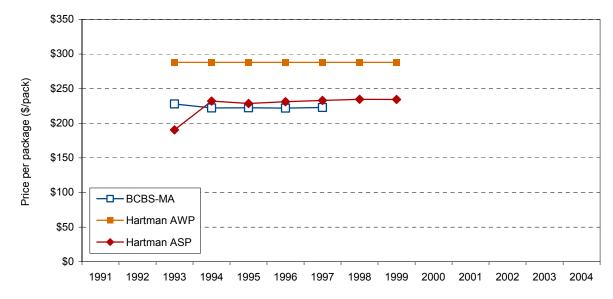
<sup>&</sup>lt;sup>19</sup> See Appendix C for explanation of the calculation of dollars and prices to Massachusetts TPPs.

Figure 17: PARAPLATIN (NDC 00015321530) prices to BCBS-MA



Source: Bristol-Myers Squibb indirect sales data.

Figure 18: PROCRIT (NDC 59676030401) prices to BCBS-MA



Source: Johnson & Johnson indirect sales data.

Figure 19: PROCRIT (NDC 59676031001) prices to BCBS-MA

Source: Johnson & Johnson indirect sales data.

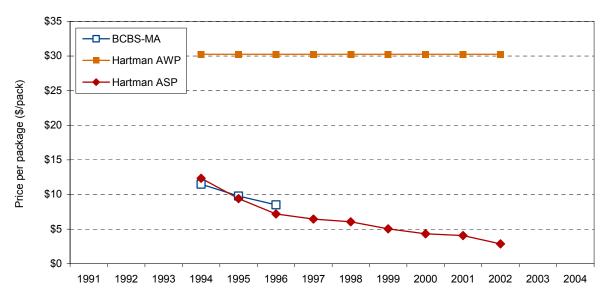
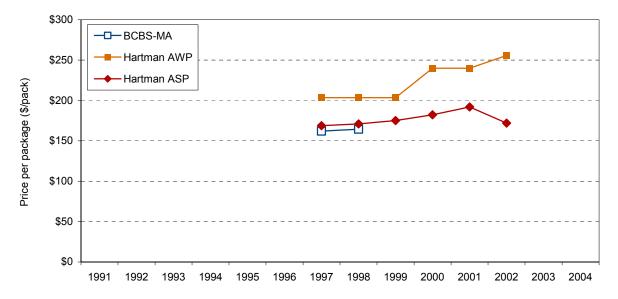


Figure 20: ALBUTEROL (NDC 59930150008) prices to BCBS-MA

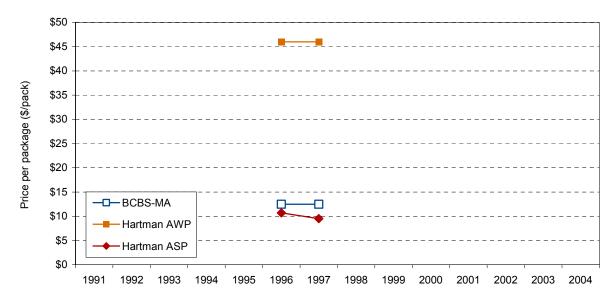
Source: Schering-Plough indirect sales data.

Figure 21: INTRON (NDC 00085118402) prices to BCBS-MA



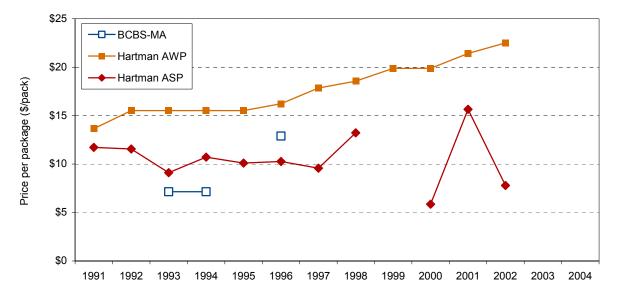
Source: Schering-Plough indirect sales data.

Figure 22: PERPHENAZINE (NDC 59930160001) prices to BCBS-MA



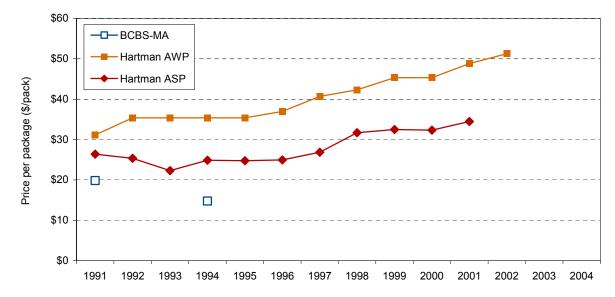
Source: Schering-Plough indirect sales data.

Figure 23: PROVENTIL (NDC 00085020802) prices to BCBS-MA



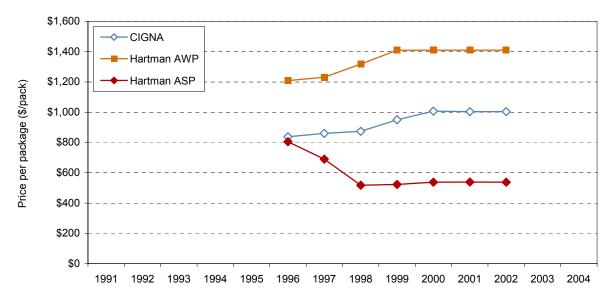
Source: Schering-Plough indirect sales data.

Figure 24: PROVENTIL (NDC 00085020901) prices to BCBS-MA



#### **CIGNA**

Figure 25: ZOLADEX (NDC 00310096130) prices to CIGNA



Source: AstraZeneca indirect sales data.

Figure 26: BLENOXANE (NDC 00015301020) prices to CIGNA

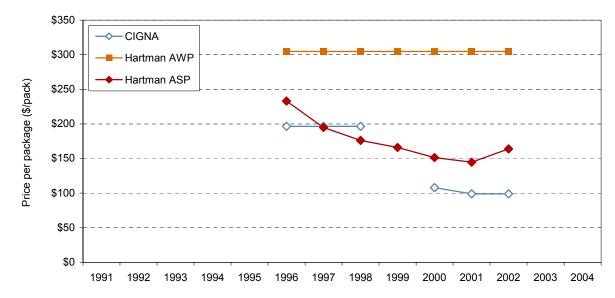
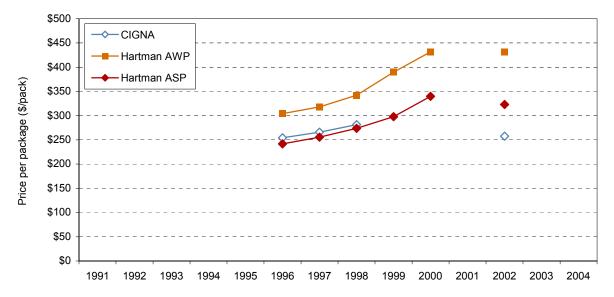


Figure 27: CYTOXAN (NDC 00015050301) prices to CIGNA



Source: Bristol-Myers Squibb indirect sales data.

Figure 28: CYTOXAN (NDC 00015054841) prices to CIGNA

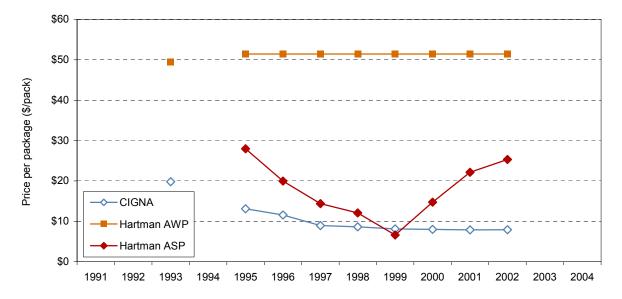
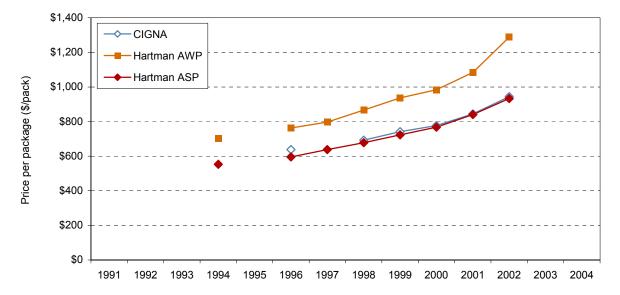
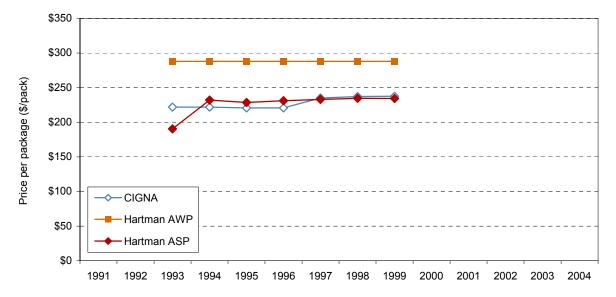


Figure 29: PARAPLATIN (NDC 00015321530) prices to CIGNA



Source: Bristol-Myers Squibb indirect sales data.

Figure 30: PROCRIT (NDC 59676030401) prices to CIGNA



Source: Johnson & Johnson indirect sales data.

\$800 \$700 \$600 Price per package (\$/pack) \$500 \$400 \$300 **CIGNA** \$200 Hartman AWP \$100 Hartman ASP \$0 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 1991

Figure 31: PROCRIT (NDC 59676031001) prices to CIGNA

Source: Johnson & Johnson indirect sales data.

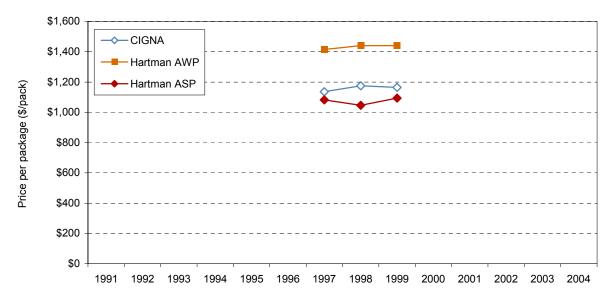
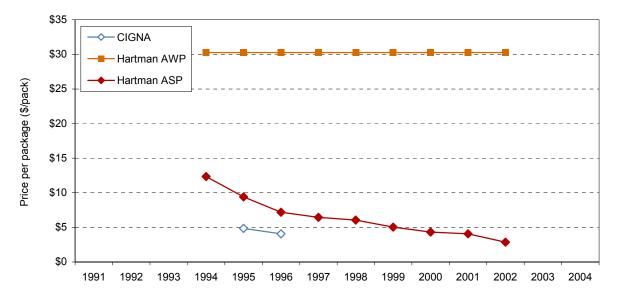


Figure 32: PROCRIT (NDC 59676032001) prices to CIGNA

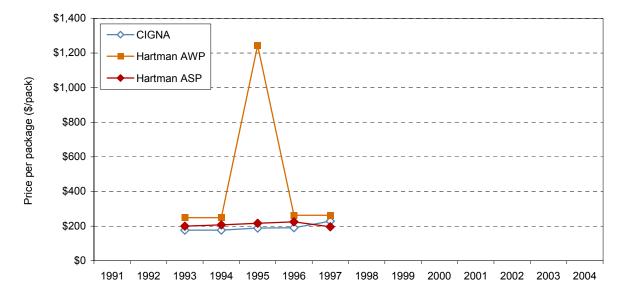
Source: Johnson & Johnson indirect sales data.

Figure 33: ALBUTEROL (NDC 59930150008) prices to CIGNA



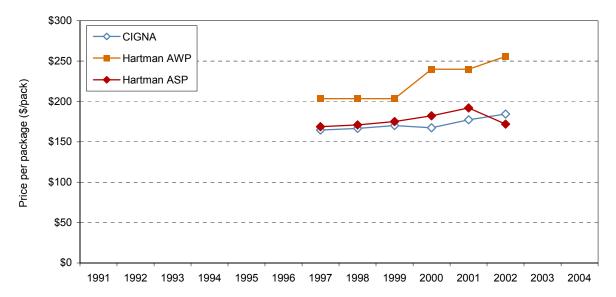
Source: Schering-Plough indirect sales data.

Figure 34: INTRON (NDC 00085076901) prices to CIGNA<sup>20</sup>



See footnote 17 above.

Figure 35: INTRON (NDC 00085118402) prices to CIGNA



Source: Schering-Plough indirect sales data.

Figure 36: PERPHENAZINE (NDC 59930160501) prices to CIGNA

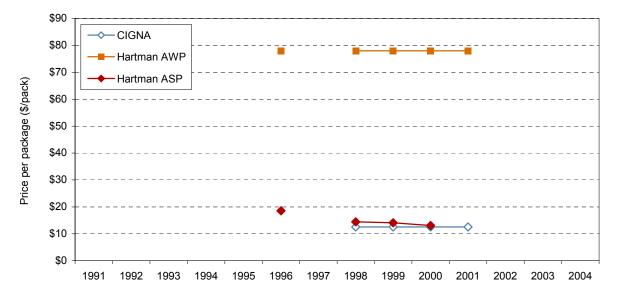
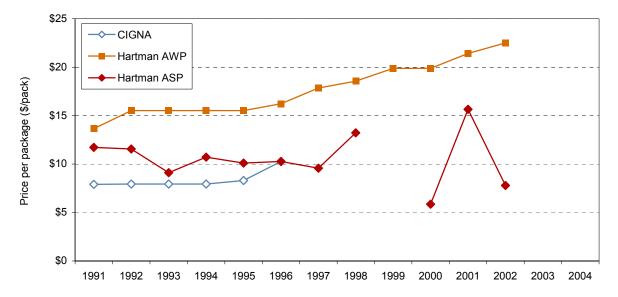
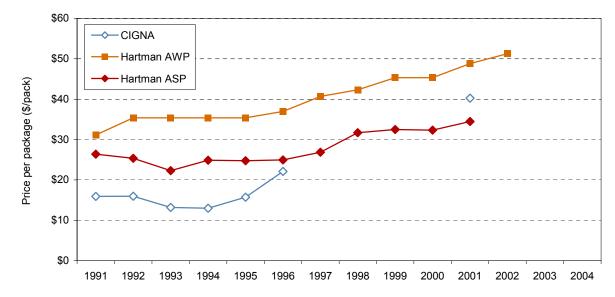


Figure 37: PROVENTIL (NDC 00085020802) prices to CIGNA



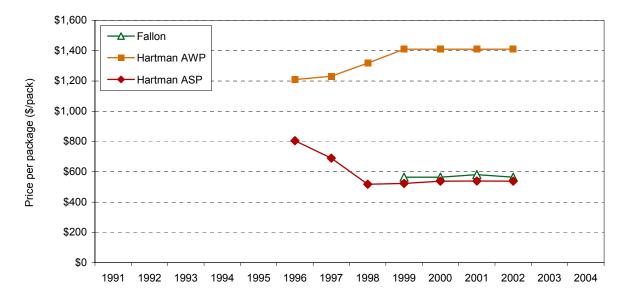
Source: Schering-Plough indirect sales data.

Figure 38: PROVENTIL (NDC 00085020901) prices to CIGNA



#### **Fallon**

Figure 39: ZOLADEX (NDC 00310096130) prices to Fallon



Source: AstraZeneca indirect sales data.

Figure 40: BLENOXANE (NDC 00015301020) prices to Fallon

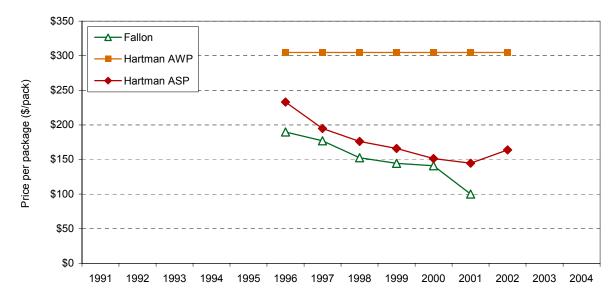
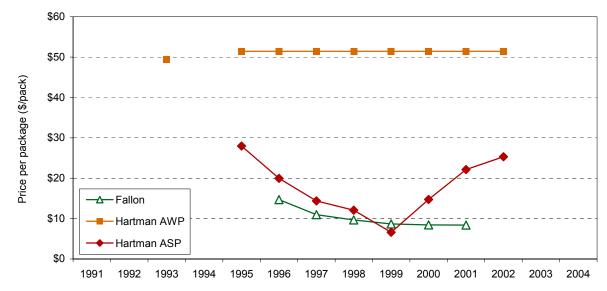


Figure 41: CYTOXAN (NDC 00015054841) prices to Fallon



Source: Bristol-Myers Squibb indirect sales data.

Figure 42: PARAPLATIN (NDC 00015321530) prices to Fallon

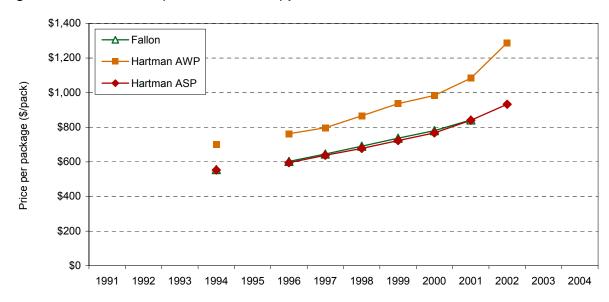
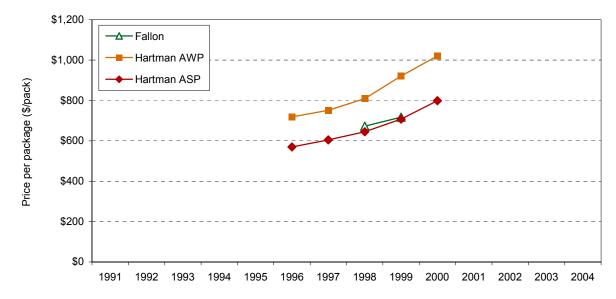
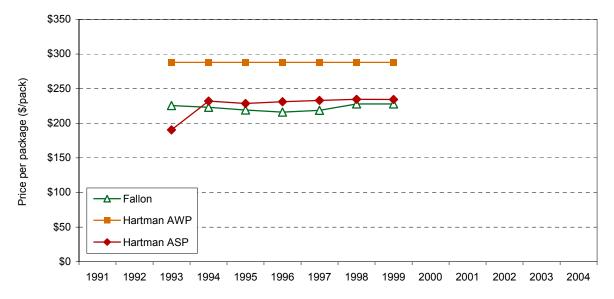


Figure 43: VEPESID (NDC 00015309145) prices to Fallon



Source: Bristol-Myers Squibb indirect sales data.

Figure 44: PROCRIT (NDC 59676030401) prices to Fallon



Source: Johnson & Johnson indirect sales data.

\$800 \$700 \$600 Price per package (\$/pack) \$500 \$400 \$300 Fallon \$200 Hartman AWP \$100 Hartman ASP \$0 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004

Figure 45: PROCRIT (NDC 59676031001) prices to Fallon

Source: Johnson & Johnson indirect sales data.

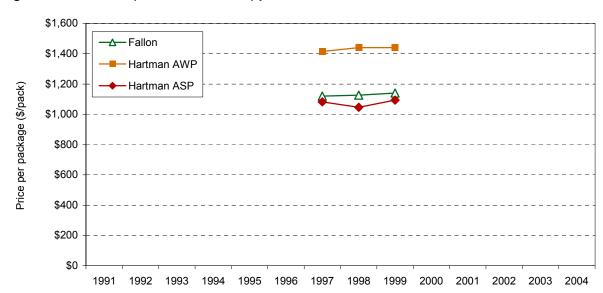
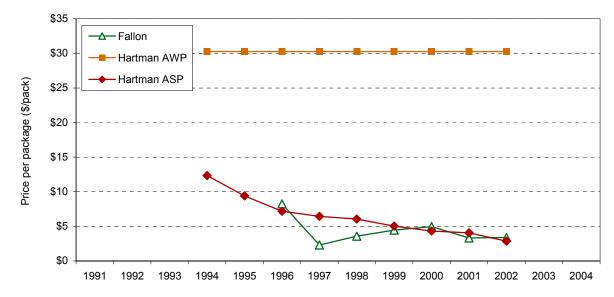


Figure 46: PROCRIT (NDC 59676032001) prices to Fallon

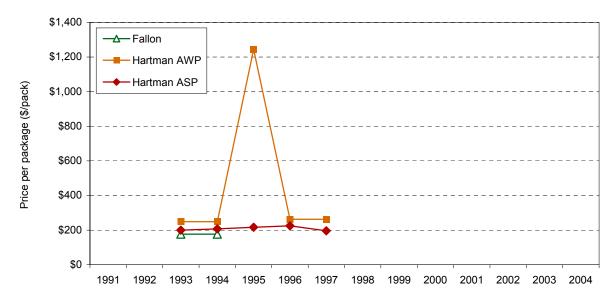
Source: Johnson & Johnson indirect sales data.

Figure 47: ALBUTEROL (NDC 59930150008) prices to Fallon



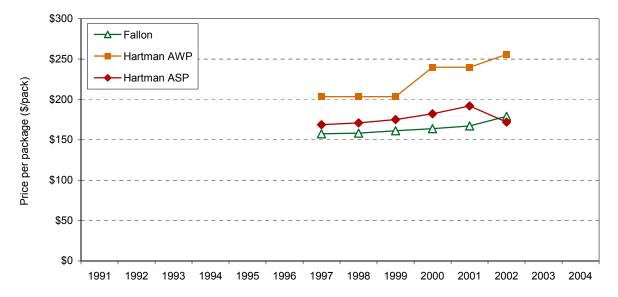
Source: Schering-Plough indirect sales data.

Figure 48: INTRON (NDC 00085076901) prices to Fallon<sup>21</sup>



<sup>&</sup>lt;sup>21</sup> See footnote 17 above.

Figure 49: INTRON (NDC 00085118402) prices to Fallon



Source: Schering-Plough indirect sales data.

Figure 50: PROVENTIL (NDC 00085020802) prices to Fallon

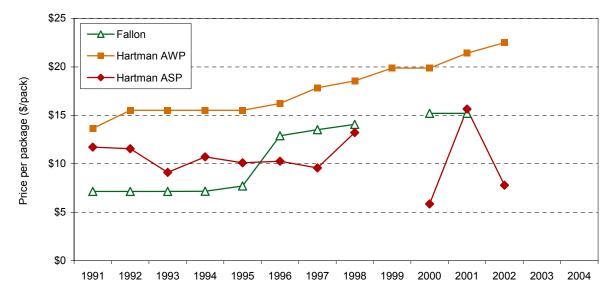
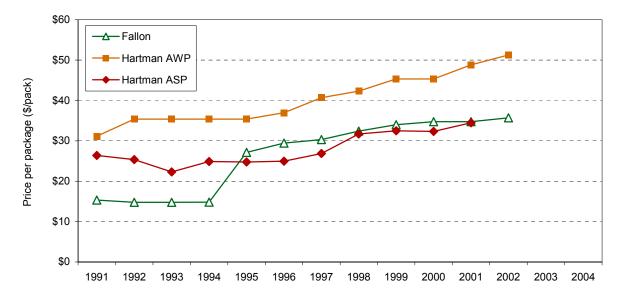
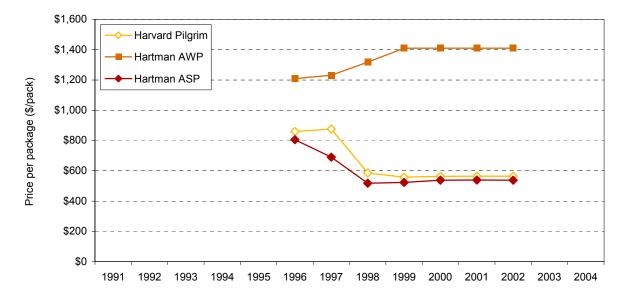


Figure 51: PROVENTIL (NDC 00085020901) prices to Fallon



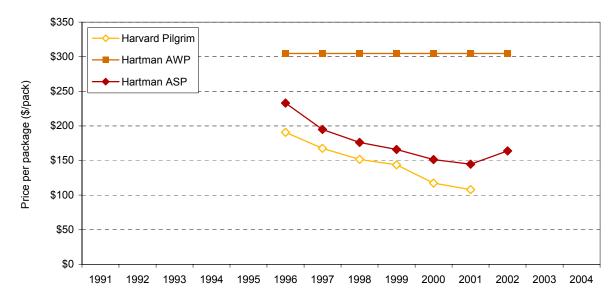
#### **Harvard Pilgrim**

Figure 52: ZOLADEX (NDC 00310096130) prices to Harvard Pilgrim



Source: AstraZeneca indirect sales data.

Figure 53: BLENOXANE (NDC 00015301020) prices to Harvard Pilgrim



\$500
\$450
\$400
\$400
\$3350
\$3300
\$250
\$150
\$100
\$50

Figure 54: CYTOXAN (NDC 00015050301) prices to Harvard Pilgrim

Source: Bristol-Myers Squibb indirect sales data.

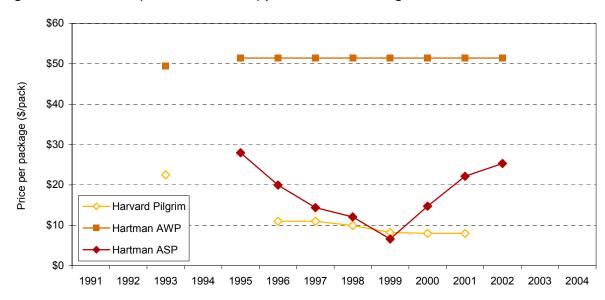
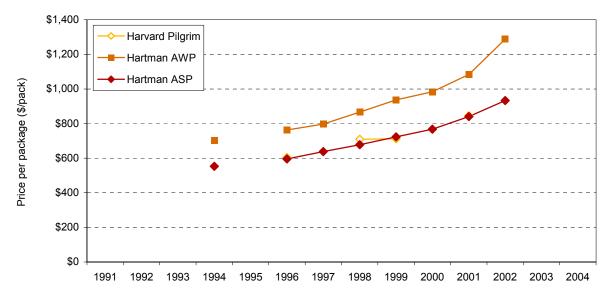


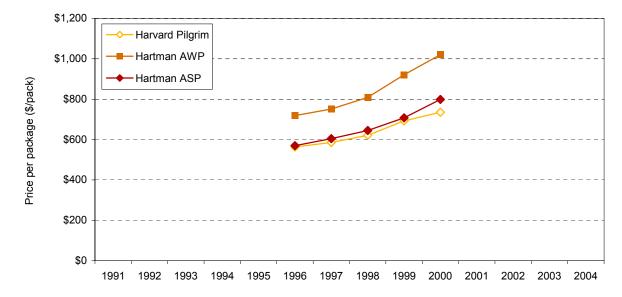
Figure 55: CYTOXAN (NDC 00015054841) prices to Harvard Pilgrim

Figure 56: PARAPLATIN (NDC 00015321530) prices to Harvard Pilgrim



Source: Bristol-Myers Squibb indirect sales data.

Figure 57: VEPESID (NDC 00015309145) prices to Harvard Pilgrim



\$350 \$300 Price per package (\$/pack) \$250 \$200 \$150 \$100 Harvard Pilgrim Hartman AWP \$50 Hartman ASP \$0 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 1991

Figure 58: PROCRIT (NDC 59676030401) prices to Harvard Pilgrim

Source: Johnson & Johnson indirect sales data.

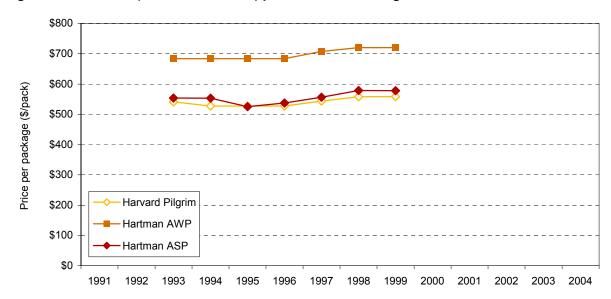
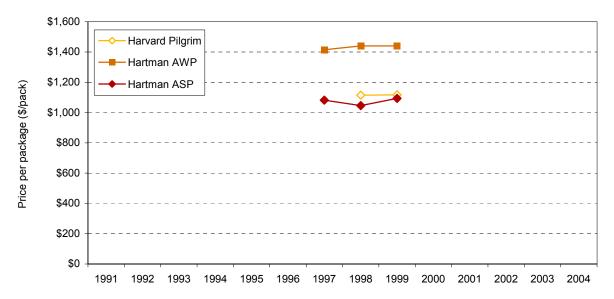


Figure 59: PROCRIT (NDC 59676031001) prices to Harvard Pilgrim

Source: Johnson & Johnson indirect sales data.

Figure 60: PROCRIT (NDC 59676032001) prices to Harvard Pilgrim



Source: Johnson & Johnson indirect sales data.

Figure 61: ALBUTEROL (NDC 59930150008) prices to Harvard Pilgrim

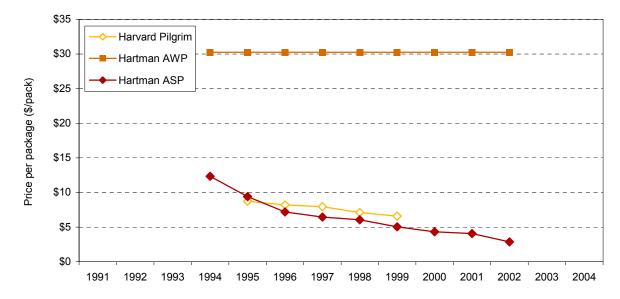
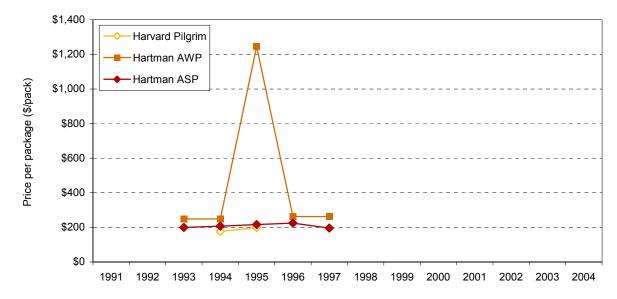
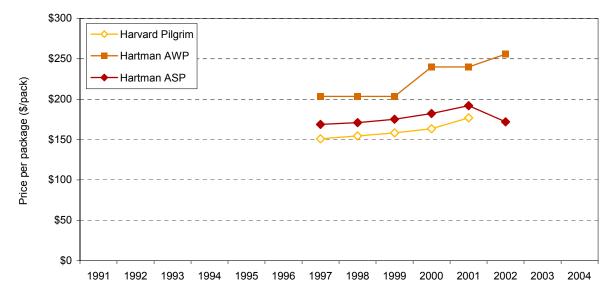


Figure 62: INTRON (NDC 00085076901) prices to Harvard Pilgrim<sup>22</sup>



Source: Schering-Plough indirect sales data.

Figure 63: INTRON (NDC 00085118402) prices to Harvard Pilgrim



<sup>&</sup>lt;sup>22</sup> See footnote 17 above.

\$25

Harvard Pilgrim
Hartman AWP
Hartman ASP

\$15

\$10

\$5

Figure 64: PROVENTIL (NDC 00085020802) prices to Harvard Pilgrim

Source: Schering-Plough indirect sales data.

\$0

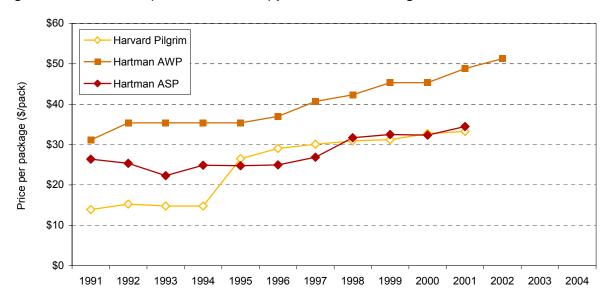


Figure 65: PROVENTIL (NDC 00085020901) prices to Harvard Pilgrim

# Appendix C: Calculation of sales dollars and prices to Massachusetts TPPs

(11) In this appendix, I describe the electronic source data and data processing I employ to identify relevant Massachusetts TPP entities and calculate the dollar volumes and prices they paid for physician-administered drugs. I also list the relevant purchasing entities and detail their relationships with the Massachusetts TPPs.

#### **Electronic source data**

I calculate dollar volumes and prices paid by Massachusetts TPPs using manufacturer chargeback sales data. Below, I list the data tables used for each manufacturer, along with the drugs and time periods for which data were available. I also list the fields used to calculate dollar volumes and prices and the fields used to identify relevant purchasing entities. These entities were identified using the combination of three types of fields: customer name, contract owner name, and state.

#### **AstraZeneca**

Data tables

- · cntmgt zoladex indirect sales
- AZ Sales Based Customers.csv—produced by Dr. Hartman on February 3, 2006

Drugs included

Zoladex

Time coverage

• 1991–2004

Fields for calculating dollar volumes and prices

- net sales
- no\_of\_packages

Field for identifying relevant purchasing entities

- customer name
- contract owner
- state

Fields for identifying products

• product ndc

#### **Bristol-Myers Squibb**

Data tables

• Indirect.txt

Drugs included

• Blenoxane, Cytoxan, Paraplatin, Taxol, Vepesid

Time coverage

• 1993–2002

Fields for calculating dollar volumes and prices

- chbk-adj-contr-prc
- chbk-adj-prod-qty

Fields for identifying relevant purchasing entities

- custname
- ownername
- custst

Fields for identifying products

• chbk-ndc-prod-code

#### **Johnson & Johnson**

Data tables

• jj imhe combined chargeback

Drugs included

• Procrit

Time coverage

• 1991–1999

Fields for calculating dollar volumes and prices

- amt\_contract\_price
- units

Fields for identifying relevant purchasing entities

- cust\_name
- cust state

Fields for identifying products

• ndc no

#### **Schering-Plough**

Data tables

- schering chargeback 1991 1994
- schering\_chargeback 1995 1998
- schering chargeback 1999 2001
- schering\_chargeback\_2002\_2004

Drugs included

• Albuterol, Intron, Perphenazine, Proventil, Temodar

#### Time coverage

• 1991–2004

Fields for calculating dollar volumes and prices

- extended amount
- quantity

Fields for identifying relevant purchasing entities

- customer name
- buying group name
- customer state

Fields for identifying products

ndc no

#### **Data processing**

- Create purchaser table
  - Identify relevant purchasing entities using customer name, owner name, and state fields present in the manufacturer data
    - Identify purchases by Massachusetts TPPs and their related entities<sup>23</sup>
    - For payors other than CIGNA, a national health plan, I restrict my analysis to purchases in Connecticut, New Hampshire, New Jersey, New York, Massachusetts, Rhode Island, and Vermont.
- Create sales table
  - Pull sales data from manufacturer chargeback tables as specified above.
    - Limit selection to NDCs included in Dr. Hartman's damage analysis
- Merge sales table and purchaser table

The following section details the entities I include in my analysis.

- Keep only sales data for relevant purchasing entities
- Merge manufacturer data with Dr. Hartman's AWP and ASP data
- For table 2, sum purchases by Massachusetts TPP and manufacturer
- For table 3, sum purchases by Massachusetts TPP and year
- For price graphs, calculate quantity-weighted purchase prices by year and Massachusetts TPP
- For tables 4 through 18, calculate markups as the differences between Dr. Hartman's AWPs and the Massachusetts TPP purchase prices, expressed as a percentage of the purchase prices

#### **Relevant purchasing entities**

(13) Table 19 below lists the customer/contracting entities appearing in the manufacturer chargeback data that I identify as being related to a Massachusetts TPP.

Table 19: Purchasing entities related to Massachusetts TPPs<sup>24</sup>

ТРР	Purchaser name from chargeback data	Relationship to TPP	
BCBS-MA	HMO Blue	Health plan offered by BCBS-MA starting in 1992 <sup>25</sup>	
BCBS-MA	Medical East	Staff model HMO owned by BCBS-MA from the late 1980's through 1997 <sup>26</sup>	
BCBS-MA	Medical West	Staff model HMO owned by BCBS-MA from the late 1980's through 1997 <sup>27</sup>	
BCBS-MA	Bay State Health Care, Inc	Merged with BCBS-MA in 1992 <sup>28</sup>	
CIGNA	CIGNA Pharmacy	Offered as part of CIGNA's health plan <sup>29</sup>	
CIGNA	Connecticut General Life Insurance Company (CG)	Merged with INA Healthplan to become CIGNA in 1982 <sup>30</sup>	
CIGNA	Insurance Company of North America (INA Healthplan)	Merged with CG to become CIGNA in 1982 <sup>31</sup>	
CIGNA	EQUICOR	Employee benefit plan purchased by CIGNA in 1990 <sup>32</sup>	
CIGNA	Lovelace Health Systems, INC (Lovelace)	Integrated healthcare system which was a subsidiary of CIGNA from 1991-2003 <sup>33</sup>	
CIGNA	RxPrime	PBM managed by CIGNA from 1992 through 2000 <sup>34</sup>	

<sup>&</sup>lt;sup>24</sup> AIS Directory of Health Plans: 2004, MCOs table.

http://www.bluecrossma.com/common/en\_US/aboutUsIndex.jsp. See History section of this link for discussion of HMO Blue's beginnings in 1992. Also note that HMO Blue is a current plan offering of BCBS-MA. See http://www.bluecrossma.com/common/en\_US/healthPlansIndex.jsp?levelOneDotFive Category=HMO&levelTwoCategory=HMO+Blue&targetTemplate=titleBodyAddLvl.jsp.

See Mulrey deposition, pp. 12-13, 17. Also see http://www.bluecrossma.com/common/en\_US/aboutUsIndex.jsp?repId=Repositories.PressReleases.2001PressReleases.pressRelease04052001.xml&levelTwoCategory=News+%28with+Archives%29&isLevelThreeSelected=true&targetTemplate=pressReleaseDetail.jsp&iphl=medicall:medical:east.

See Mulrey deposition, pp. 12-13, 17. Also see http://www.bluecrossma.com/common/en\_US/aboutUsIndex.jsp?repId=Repositories. PressReleases.2001PressReleases.pressRelease04052001.xml&levelTwoCategory=News+%28with+Archives%29&isLevelThreeSelected=true&targetTemplate=pressReleaseDetail.jsp&iphl=medicall:medical:east.

Merged with BCBSMA in 1992. See http://caselaw.lp.findlaw.com/cgi-bin/getcase.pl?court=1st&navby=case&no=012586. Also see article available through http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\_uids=10133054&query.hl=2&itool=pubmed\_docsum.

http://www.cigna.com/health/consumer/service/pharmacy\_claim.html.

<sup>30</sup> In 1982 Connecticut General Life Insurance Company and the Insurance Company of North America, two health care insurance carriers merged to form CIGNA. See http://www.cigna.com/general/about/history.html.

http://www.cigna.com/general/about/history.html.

http://www.cigna.com/general/about/history.html.

Cigna acquired 100 percent ownership of Lovelace in 1991 and sold the subsidiary to Ardent Health in 2003. See <a href="http://www.cigna.com/general/about/investor/release/10k20021231.html">http://www.cigna.com/general/about/investor/release/10k20021231.html</a> and <a href="http://www.ardenthealth.com/CustomPage.asp?PageName=Lovelace">http://www.lovelacesandia.com/CustomPage.asp?PageName=Lovelace</a>. Also see <a href="http://www.lovelacesandia.com/CustomPage.asp?guidCustomContentID=A89B6170-7BC2-4F3D-97A5-41F9BA70E1D5">http://www.lovelacesandia.com/CustomPage.asp?guidCustomContentID=A89B6170-7BC2-4F3D-97A5-41F9BA70E1D5</a>.

<sup>34</sup> http://www.cigna.com/general/about/history.html and http://www.equityleague.org/PDF/cigna pharmacy guide.pdf.

ТРР	Purchaser name from chargeback data	Relationship to TPP
CIGNA	Tel-Drug	Mail order pharmaceutical company purchased to merge with RxPrime from 1993–2000 <sup>35</sup>
CIGNA	Healthsource	Health care company purchased by CIGNA in 1997 <sup>36</sup>
Fallon Community Health Plan (FCHP)	Fallon Clinic	Founded the Fallon Clinic Foundation which managed FCHP until 2004 <sup>37</sup>
Fallon Community Health Plan (FCHP)	Fallon Central Pharmacy (FCP)	Main pharmacy for the Fallon Clinic until 2002 <sup>38</sup>
Harvard Pilgrim Health Care (HPHC)	Harvard Community Health Plan (HCHP)	Staff model HMO that merged with HPHC in 1994. Owner of Harvard Vanguard through 1997 <sup>39</sup>
Harvard Pilgrim Health Care (HPHC)	Harvard Vanguard	Physician group, founded in 1969 by HCHP, spun off from HPHC in 1997 <sup>40</sup>
Harvard Pilgrim Health Care (HPHC)	Multigroup	Regional New England HMO acquired by HCHP in 1986 <sup>41</sup>
Harvard Pilgrim Health Care (HPHC)	Rhode Island Group Health (RIGH)	Staff model HMO acquired by HCHP in 1992, which closed in 1999 <sup>42</sup>

http://www.cigna.com/general/about/history.html.

http://www.cigna.com/general/about/history.html.

Fallon Clinic is a healthcare provider organization, which runs medical centers, physician offices, ambulatory care centers, and other provider locations. See http://www.fchp.org/about/index.aspx and http://www.fchp.org/brokers/qa.aspx#Anchor246. Fallon Clinic founded The Fallon Clinic Foundation, a non-profit public charity, 1988. The Fallon Clinic Foundation governed Fallon Community Health Plan until 2004. See http://www.bizjournals.com/boston/stories/2005/01/03/daily50.html and http://www.fallonclinicfoundation.org/ourstory/ourstory.aspx. Each Fallon Clinic location can be called a Fallon Medical Center. For example, the clinic location in Auburn, MA can be called "Fallon Medical Center Auburn," as shown in http://www.fchp.org/SeniorPortal/Sales.aspx. Also see http://www.fallonclinic.com/internet/patients/index.aspx?PAGE=locations&LEVEL1=patients&LEVEL2=locations.

http://www.fchp.org/brokers/resources/brokerEdge/BrokerEdgeFall02.pdf.

Harvard Community Health Plan was a health insurance carrier, founded in 1969, that merged with Harvard Pilgrim Health Care in 1994 and took on the name Harvard Pilgrim. http://www.managedcaremag.com/archives/0002/0002.harvard.html and http://www.prospect.org/columns/kuttner/bk000109.html.

http://www.bizjournals.com/boston/stories/1999/12/20/story6.html. Also see http://www.harvardvanguard.org/about/faq.asp. Also see http://www.managedcaremag.com/archives/0002/0002.harvard.html.

<sup>41</sup> Regional New England HMO acquired by Harvard Community Health Plan in 1986. http://www.managedcaremag.com/archives/0002/0002.harvard.html.

http://findarticles.com/p/articles/mi\_qa4100/is\_200506/ai\_n14715983. Also see http://www.managedcaremag.com/archives/0002/0002.harvard.html.

### **Appendix D: Supporting documentation**

## UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

IN RE PHARMACEUTICAL INDUSTRY	)	
AVERAGE WHOLESALE PRICE	) MDL No. 1456	
LITIGATION	)	
	_) CIVIL ACTION: 01-CV-12257-PBS	
	)	
THIS DOCUMENT RELATES TO	) Judge Patti B. Saris	
01-CV-12257-PBS AND 01-CV-339	)	
	) Chief Magistrate Judge Marianne B. Bowler	
	)	
	) [FILED UNDER SEAL PURSUANT TO	
	) COURT ORDER]	
	)	

DECLARATION OF RAYMOND S. HARTMAN
IN SUPPORT OF PLAINTIFFS' CLAIMS OF LIABILITY
AND CALCUATION OF DAMAGES

for the underlying spreads. Had the existence of the "mega-spreads" been perceived and understood by TPPs, those payors would have negotiated more aggressively than they did, leading to lower reimbursement rates. The lower reimbursement rates would have been related to the drug acquisition cost to the provider (or the ASP), which was well below the inflated AWP. Because the "mega-spreads" were not perceived, the reimbursement rates were negotiated relative to the artificially inflated AWPs, which were in many cases 50%-1000% above the actual provider acquisition costs.

#### E. The Economic Incentives Motivating the Alleged Fraudulent Pricing Scheme

16. For all three Sub-Classes, I discussed incentives and the opportunities for the alleged pricing abuses for physician-administered and Medicare Part B drugs in Attachment F to my September 3, 2004 Declaration in Support of Class Certification. Regarding this, the Court states (emphases added **in bold**):

"Because doctors are involved as both retailers and as prescribing physicians, manufacturers, realizing the purchasing power of physicians, provide them with rebates, leading to large profits for the doctors on the prescription and administration of certain drugs. These profits now allegedly comprise a large percentage of these doctors' income; according to Hartman, two thirds of the income of practice-based oncologists comes from the mark-up on injectable drugs. ... Some experts have commented that 'the financial incentives created by this profitability played a large and problematic role in prescribing decisions' from 1998-2003 because 'prescribers responded to these high margins by tending towards administering more (and more expensive) drugs than might be medically necessary or optimal for the health of the patient.""

"Because physician-administered drug reimbursement has been based on a fivedigit 'J-Code' system, which does not differentiate for strength, dosage and

invested would accrue to more members. This theory is supported by record evidence from Coventry, with more than 2.4 million lives insured, and plaintiff Philadelphia Federation of Teachers Health and Welfare Fund ("Teachers"), with between 55,000 and 65,000 insured lives."

Mr. Young correctly states at ¶ 126 of his Rebuttal Declaration, "The level of consideration, including drug reimbursement that Payors negotiate to pay PBMs is impacted by the Payors leverage in those contract negotiations. Among the most significant sources of a Payor's leverage is the volume of lives it represents. Large Health Plans representing millions of lives may have more leverage, for example, than small union benefit funds with relatively small representation. That leverage allows the larger Health Plans to negotiate deeper discounts, lower administrative fees, up-front payments, and preferential rebates and guarantees."

While TPP size may be more important in negotiations regarding reimbursement rates for self-administered drugs, size will also matter for physician-administered drugs.

Michael T. Mulrey

CONFIDENTIAL

Boston, MA

January 5, 2006

		Page 1	
1	THE UNITED STATES DISTRICT COURT		
2	FOR THE DISTRICT OF MASSACHUSETTS		
3	************		
4	IN RE: PHARMACEUTICAL	MDL DOCKET NO.	
5	INDUSTRY AVERAGE WHOLESALE	01CV12257-PBS	
6	PRICE LITIGATION		
7	*******	DEPOSITION OF	
8	THIS DOCUMENT RELATES TO:	MICHAEL T. MULREY	
9	ALL ACTIONS	JANUARY 5, 2006	
10	*******		
11	CONFIDENTIAL		
12	DEPOSITION of MICHAEL T. MULREY, a witness called on		
13	behalf of the Defendant Johnson & Johnson pursuant to		
14	the Federal Rules of Civil Procedure, before Judith		
15	McGovern Williams, Certified Shorthand Reporter,		
16	Registered Professional Reporter, Certified Realtime		
17	Reporter, Certified LiveNote Reporter, and Notary		
18	Public in and for the Commonwealth of Massachusetts,		
19	at the offices of Robins, Kaplan, Miller & Ciresi,		
20	L.L.P., 800 Boylston Street, Boston, Massachusetts		
21	02199, on Thursday, January 5, 2006, commencing at		
22	1:38 p.m.		

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Page 10 Page 12 Q. Okay. A. Worked for a company by the name of 1 1 2 A. -- as their first point of contact. 2 Barrow Industries, which is a wholesaler of 3 Q. Which department at Blue Cross/Blue 3 drapery and carpeting, I think is what it was, and Shield of Massachusetts is responsible today for that was from probably, oh, '91 -- excuse me --4 4 5 actually drafting and executing contracts with 5 not '91 -- what did I say? 6 physicians for the reimbursement of drugs? 6 Q. '81? 7 A. Provider contracting. 7 A. The first one -- yes, '81. So that was 8 Q. Okay. How long have you been a manager 8 from '81 to '87. 9 of the provider reimbursement department? 9 Q. Okay. What did you do next? A. October of 2000 through present. 10 10 A. Joined Blue Cross/Blue Shield in 1987. Q. Just stepping back, if you would O. What was your initial position? 11 11 describe for the record your post high school 12 A. Senior financial analyst. 12 13 education and then your post high school 13 Q. What department were you in? employment, leading up to October of 2000. A. Finance department. 14 14 A. A graduate of St. Anselm's College, B.A. Q. What were your responsibilities as a 15 15 16 degree. 16 senior financial analyst in the finance department? 17 Q. Any specialty? 17 18 A. Business and economics. 18 A. We maintained all the financial 19 And then what was the second part of 19 information for our health centers back in the 20 that question again? 20 early -- late '80s, early '90s. Q. I will follow up. After getting --O. What is a health center? 21 21 obtaining your B.A., have you obtained any other 22 A. They were the staff model HMOs that Blue 22 Page 11 Page 13 educational degree? Cross owned through their Medical East/ Medical 1 1 2 A. No. 2 West Corporation back in the late '80s, early 3 Q. Have you taken any courses relating to 3 '90s. the reimbursement of physician-administered drugs? 4 4 O. When you referred to a staff model HMO, 5 5 did Blue Cross/Blue Shield of Massachusetts own A. No. O. Have you taken any courses relating to both pharmacies and physician groups as part of 6 6 prescription drugs generally? 7 that HMO? 7 A. No. 8 8 A. I can tell you there were pharmacies 9 9 within the physical buildings themselves, and the Q. What was your first employment after 10 graduating from college? 10 physicians themselves were, as far as I knew, they were salaried through Blue Cross or through 11 A. Oh, God. 11 MR. HARRINGTON: If you need a minute to Medical East/Medical West. 12 12 remember back that far, Mike. 13 Q. So the physicians were employees of the 13 THE WITNESS: It was a while. 14 14 15 15 (Laughter.) A. Yes. Q. -- clinics? A. I am going to say it was probably with 16 16 17 Aetna as a claims examiner in the auto industry 17 A. Yes. 18 back then. 18 Q. And those clinics were owned by Blue 19 Q. Okay. For what years did you hold that 19 Cross/Blue Shield of Massachusetts? position approximately? 20 20 A. Yes. A. All right. Probably '79 to '81. Q. Now I am sorry, was it Medical 21 21 Q. What did you do next? 22 East/Medical West you referred to? 22

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Page 14 Page 16 A. Yes. Q. So what in particular did you do with 1 1 2 Q. What is that? 2 respect to the maintenance of financial 3 A. That was a corporate name under which 3 information for the health centers? 4 the staff model HMOs were kind of set up under. 4 A. We compiled, you know, each health 5 Q. Was Medical East/Medical West a 5 center had its own kind of senior financial 6 subsidiary of Blue Cross/Blue Shield of 6 analyst that was in charge of compiling kind of 7 Massachusetts? 7 their financial statements at the close of each 8 A. Yes. 8 month, so your profit and loss statements, your 9 Q. A wholly-owned subsidiary? 9 balance sheets and such. 10 A. I'm not sure on that. 10 Q. All right. Those P & L's, were they Q. Do you recall who was in charge of consolidated with Blue Cross/Blue Shield's? 11 11 12 Medical East and West from the late '80s and early A. Yes. We would send them up to 12 13 '90s? 13 corporate, and somewhere that would happen. 14 A. Each health center had its own executive Q. Were you responsible for all of the 14 director. I am trying to think. There was a health centers or particular ones? 15 15 senior group above them. Oh, I want to say it had 16 16 A. Just one that I worked out of. its own separate kind of president, if you will, 17 17 Q. So you actually worked at the site? 18 for Medical East/Medical West. I just for the 18 A. Yes. life of me can't think of the -- it was a man at 19 Q. Which one was that? 19 20 the time I was there -- his name. 20 A. At Braintree. Q. Did this, the president of Medical East 21 21 Q. And what was the nature of that site? and West, report in to someone in Blue Cross/Blue 22 22 Was it a hospital, a pharmacy, a clinic, all Page 15 Page 17 Shield? 1 1 three? 2 A. Yes. As far as I knew, yes. 2 A. It was physician offices. The pharmacy 3 Q. Do you know who that was? 3 was in the building as well, a small lab area. A. No. 4 4 O. Just to get the time frame down, this is 5 Q. How many health centers were there? 5 from 1987 until about what time? A. There were eight, four in the west, four 6 6 A. About '91. 7 7 in the east. Q. At this time did you move on to another 8 Q. And when you say east and west, are we 8 position? talking east and west of Massachusetts? 9 9 A. Yes. A. Yes. East and west. West of Worcester 10 Q. What was that? 10 and east of Worcester, if you will, hence Medical 11 A. I moved on to become a business analyst 11 12 East/Medical West. 12 under the HMO Blue information systems area. 13 Q. Okay. Did Blue Cross/Blue Shield of 13 MR. HARRINGTON: They are from out of Massachusetts spin off, sell, or otherwise disband 14 14 town. the staff model HMOs in 1991? 15 MR. HAAS: I am thinking Mississippi 15 versus -- actually I grew up in Lexington, so. A. Not in '91, no. 16 16 17 MR. HARRINGTON: West of Worcester is 17 Q. Did there come a point in time that they did? 18 the west coast here. 18 19 19 (Laughter.) A. Yes. THE WITNESS: So he knows where 20 O. When was that? 20 A. I think it was in the time frame of '96-21 Worcester is. 21 '97. 22 BY MR. HAAS: 22